

PAPERS READ.

ON A VERY DOLICHOCEPHALIC SKULL OF AN AUSTRALIAN
ABORIGINAL.

BY N. DE MIKLOUHO-MACLAY.

PLATE 19.

Although the index of breadth or the cephalic index of the skull does not appear to modern anthropologists of so great an importance for the classification of human races, as in the time of Retzius, it remains still a very important character in Craniology.

A skull which has been lately acquired by the Australian Museum, is a most interesting specimen as regards its very low cephalic index, which is, I dare say, a lower index than that of any crania ever described before. This skull, or more correctly the cranium, (the bones of the face are broken off, and the lower jaw is wanting), was, before the Museum purchased it, in possession of Mr. Hume, a "Phrenologist," residing and lecturing at present in Sydney. Finding the skull of great interest on account of its form, I went myself to see Mr. Hume to ascertain the origin of the same. Mr. Hume told me that he had had the skull in his collection for about twenty years, and had picked it up himself in the bush somewhere, he does not remember exactly, between Toowoomba and Dalby, in 1863 or '64. According to the Statistical Reports of the Colony of Queensland, the first importations of South Sea Islanders (chiefly Melanesians), took place in 1867, so that it is nearly certain that the skull belonged to a native of Queensland.

This cranium is remarkable for its extreme length. The Ophrio-occipital length is 202 mm., the Glabello-occipital length 204 mm., by a breadth of 119 mm. So that the cephalic index, calculated on the ophrio-occipital length is 58.9 (the same index calculated by the Glabello-occipital length is 58.3.)

I must especially remark, that the skull is a normal one, *i.e.*, does not present even the slightest indications of being deformed.

It is a very fair specimen of the so-called type of *Roof-shaped* skulls.

The index of height of the skull (from the Basion* to the Bregma† 131 mm.), on account of the great length of the same, falls below the average index of height of the Australian race, which is (according to the ninth edition of Quain's Anatomy (Vol. I., p. 82), 71.—In our case it is 64.8.

In reference to my statement, that the present skull is the most dolichocephalic than has been hitherto described, I will offer a few remarks. As far back as 1867, Prof. Huxley in a paper "on two widely contrasted forms of the human cranium," (Journal of Anatomy and Physiology, Vol. 1, 1867, p. 60), records a very low breadth index of a skull of unknown origin. In a paper read by me before the Koninglijke Natuurkundige Vereeniging of Batavia, in 1874, and published in the *Natuurkundig Tijdschrift* of the same year (Vol. xxxiv., p. 345), under the title, "*Ueber Brachycephalie bei den Papuas von New Guinea.*" ‡ I mention a skull of a native (Papuan) from the Island Namatote, near the Coast of Papua-Koviay, which breadth-index was calculated being 62.0.

Prof. W. H. Flower in a paper, "*On the Cranial Characters of the Natives of the Fiji Islands*" (Journal of the Anthropological Institute, November 1880), gives some very low cephalic indices of some skulls of the Kai-Colos, or Mountaineers of the interior of Vi ti Levu; the lowest of these indices was 62.9, calculated on the Ophrio-occipital length, and 61.9 on the Glabello-occipital length.

The index of the skull before me is 58.9, and is therefore the narrowest skull ever measured.*

* *Basion*—Middle of the anterior margin of the foramen magnum.

† *Bregma*—Point of junction of the coronal and sagittal sutures.

‡ This paper was the result of a great number of measurements, the careful examination and comparison of which, led me to the conclusion, that the *cephalic index* of skulls of Natives of New Guinea varies from 62 to 84.3.

Some additional measures of the cranium.

Sagittal length of the frontal bone, from the transverse suture of the union with the nasal bone to the coronal suture...	135 mm.
Sagittal length of the parietal bone, or more correctly, length of the obliterated sagittal suture	146 mm.
Sagittal length of the occipital bone from the lambdoid suture to the posterior margin of the foramen magnum <i>about</i> (because this margin is defective).....	122 mm.
Total horizontal circumference.....	538 mm.
Minimum frontal diameter.....	88 mm.
Maximum frontal diameter above the Pterion.....	102 mm.
Maximum parietal breadth.....	119 mm.
Diameter between the ridges of the mastoid process.....	122 mm.

Explanation of Plate 19.

Fig. 1.—Side view of a skull of an Australian aboriginal from Queensland (B. 1., of the Craniological Collection of the Australian Museum in Sydney), represented *one-half* of nat. size.

The nasal bone, the lower part of the sup. maxillary bone, the Zygoma and the inferior Maxilla are wanting. The bones of the face of the other side are completely broken off.

o. p.—Ophryon or supraorbital point. g.—Glabella.

p. t.—Pterion.

b. g.—Bregma (point of junction of the sagittal and lambdoid sutures.)

b. s.—Basion (middle of the anterior margin of the foramen-magnum.

p. m.—Mastoid process.

o.—Occipital point (the point of the occiput in the mesial plane most removed from the Ophryon.)

t.—Inion (external occipital protuberance)

z.—Zygoma broken off above the glenoid fossa.

c. l.—Sup. curved line.

Fig. 2.—View of the same skull *from above*. One-half nat. size. The sagittal suture is completely obliterated.

Fig. 3.—View of the same skull *from behind* (one-half nat. size.), to show the well pronounced *roof shaped* form of the cranium.